Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.   (amended)   A method of detecting unidentified slave devices in a system including a master device and a plurality of slave devices, comprising the following steps:

a) providing each slave device in the system with an identification and pre-loading one or more slave device identifications into the master device;

b) after step a), connecting at least one slave device to the system;

c) after step b), issuing a detection command on the system from the master device; and,

d) after step c), issuing a response only from any slave devices on the system ~~for which identification information has not been loaded in~~ that have not been identified to the master device, each said response including the slave device's identification.

2.   (original)   The method of claim 1, wherein said response further includes other information pertaining to the slave device.

3.   (original)   The method of claim 1, further comprising

the step of said master device issuing a request for other

information to any slave devices that responded in step d).

4.   (previously presented)   The method of claim 1, wherein if

a slave device responds in step d), step c) is repeated

until no slave device responds in step d).

5.   (amended)   The method of claim 1, wherein <u>step b)</u>

<u>includes the step of connecting a plurality of slave device</u>

<u>to the system, and</u> said system and slave devices are

configured and/or programmed so as to preclude more than

one slave device from simultaneously responding in step d).

6.   (amended)   The method of claim [[1]] <u>5</u>, wherein step a)

includes the step of logging the identifications of a

plurality of slave devices.

7.   (amended) The method of claim 6, further comprising the

step of setting a detection status flag high in each slave

device the identification of which has been logged<u>, wherein</u>

<u>said detection status flag high represents a slave device</u>

<u>is deemed to have been identified to the master device</u>.

8.   (amended)   The method of claim 1, further comprising

the step of issuing a clock sequence on the system after

issuing said <u>detection</u> command, said clock sequence

comprising sequential clock pulses.

9.   (previously presented)   The method of claim 8, further

comprising the step of slave devices counting said

sequential clock pulses.

10.   (original)   The method of claim 9, further comprising

the step of setting a detection status flag high in any

slave devices that responded in step d).

11.   (previously presented)   The method of claim 1, wherein

said system is an electronic blasting system, said master

device is a blasting machine, and said slave device is an

electronic detonator.

12.   (previously presented)   The method of claim 9, wherein

said sequential clock pulses are correlated to possible

identifications of slave devices by one or more

calculations that include a cyclic redundancy check of

identifications of slave devices and parameters sent by the

master device.

13.   (amended)   The method of claim 1, wherein said <u>detection</u>

command is issued along with data representing the

identification of all slave devices for which

identifications were <u>pre-</u>loaded in the master device in

step a), and step d) includes the step of each slave device

receiving said <u>detection</u> command checking said data against

the identification provided to said slave device in step

a).

14.   (amended)   A slave device for use in a system including a

master device and other slave devices connected to the

system wherein the master device is pre-loaded with

identification information corresponding to at least one

slave device in the system, said slave device having an

identification and being configured and/or programmed to

issue a response to the master device including

identification of the slave device in response to a

detection command from the master device only if ~~the~~

~~identification of~~ said slave device has not been ~~pre-loaded~~

~~in~~ <u>identified to</u> the master device.

15.   (previously presented)   The slave device of claim 14,

wherein said slave device is configured and/or programmed

to issue said response upon issuance on the system of a

clock value correlated to the identification of said slave

device.

16.   (original)   The slave device of claim 15, wherein said

slave device is further configured and/or programmed to

include other information along with said response.

17.   (original)   The slave device of claim 16, wherein said

slave device is an electronic detonator.

18.   (amended)   A system including a master device and a

plurality of slave devices each connected to the master

device and having an identification wherein the master

device is pre-loaded with identification information

corresponding to at least one slave device in the system,

said system being configured and/or programmed so that, in

response to a detection command from the master device,

only any slave devices connected to the system ~~the~~

~~identification of which~~ that have not been ~~pre-loaded in~~

identified to the master device send their identification

to the master device ~~in response to a detection command~~.

19.   (original)   The system of claim 18, wherein said slave

devices include detection flag status settings that can be

set high or low.

20.   (original)   The system of claim 19, wherein said system

is an electronic blasting system, said master device is a

blasting machine, and said slave devices are electronic

detonators.

21. (amended)   A method of detecting unidentified slave

devices in a system including a master device and a

plurality of slave devices, comprising the following steps:

  a) providing each slave device in the system with an

     identification;

  b) after step a), connecting at least one slave device to

     the system;

  c) after step b), issuing a detection command on the system

     from the master device; and,

  d) issuing a clock sequence on the system after issuing

     said detection command, said clock sequence comprising

     sequential clock pulses correlated to possible

     identifications of slave devices such that each

     sequential clock pulse corresponds to a different

     multiplicity of possible identifications; and,

  e) issuing a response only from any slave devices on the

     system for which identification information has that

     have not been loaded in identified to the master device,

     said response including the slave device's

     identification.

22. (new)   A method of detecting unidentified slave devices

in a system including a master device and a plurality of

slave devices, comprising the following steps:

a) providing at least one slave device with an
   identification residing in a fixed memory in the slave
   device, and pre-loading one or more slave device
   identifications into the master device;

b) after step a), connecting at least one slave device to
   the system;

c) after step b), issuing a detection command on the system
   from the master device; and,

d) issuing a response to said detection command from any
   slave devices on the system that have not been identified
   to the master device, each said response including the
   slave device's identification.

23.   (new)   A slave device for use in a system including a
master device and other slave devices, said slave device
having an identification residing in a fixed memory in the
slave device, said slave device being configured and/or
programmed to issue a response to a detection command from
the master device if said slave device has not been
identified to said master device, said response including
identification of the slave device.

24.   (new)   A system including a master device and a
plurality of slave devices each connected to the master
device and each having an identification residing in a

fixed memory in the slave device, said system being

configured and/or programmed so that any slave devices

connected to the system that have not been identified to

the master device send their identification to the master

device in response to a detection command.